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09/963,698	09/26/2001	Francis Barany	19603/3355 (CRF D-1595E)	2018

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EXAMINER

PONNALURI, PADMASHRI

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/963,698

Applicant(s)

BARANY ET AL.

Examiner

Padmashri Ponnaluri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 89-119 is/are pending in the application.
- 4a) Of the above claim(s) 98-108, 110 and 113-119 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 89-97, 109, 111 and 112 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/26/04, 10/1/01, 8/9/04, 6/14/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The amendments filed on 8/9/04 and 11/23/04 have been fully considered and entered into the application.

#### ***Status of Claims***

2. Claims 113-119 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 9.

3. Claims 98-108 (dependent on claim 99), 110 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 9.

4. Claims 89-119 are pending in this application and Claims 89-97, 109, and 111-112 are currently being examined in this application.

5. This application contains claims 113-119 and 98-108, 110 drawn to an invention nonelected with traverse in Paper No. 9. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

6. Claims 89-119 are pending in this application and Claims 89-97, 109, and 111-112 are currently being examined in this application.

#### ***Priority***

7. This application is a divisional of application 08/794,851, which claims priority of 60/011,359 filed on 2/9/96.

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***Information Disclosure Statement***

8. The Information Disclosure Statements filed on 4/26/04, 6/14/04, 8/9/04 and 10/1/04 have been fully considered.

***Oath/Declaration***

9. The new Oath/Declaration filed on 3/8/04 has been fully considered and entered into the application.

***Drawings***

10. This application, filed under former 37 CFR 1.60, lacks formal drawings. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings. In unusual circumstances, the formal drawings from the abandoned parent application may be transferred by the grant of a petition under 37 CFR 1.182.

***Withdrawn Claim Rejections***

11. Claims 89-97, 109 and 111-112 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,510,270 (Fodor et al).

12. Claims 89-94, 96-97, 109, 111-112 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,527,681 (HOLMES).

NOTE the rejections over Fodor et al and Holmes et al have been rewritten to address the new limitations.

***Maintained Claim Rejections***

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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14. Claims 89, 93 are rejected under 35 U.S.C. 102(b) as being anticipated by Lipshutz et al (BioTechniques, Vol 19, No. 3, 1995, pages 442-447) for the reasons set forth in the previous office action mailed on 9/8/03.

15. Claims 89 and 93 are rejected under 35 U.S.C. 102(b) as being anticipated by Fodor et al (Nature, vol. 364, August 1993, pages 555-556) for the reasons set forth in the previous office action mailed on 9/8/03.

***New Claim Rejections Necessitated by the Amendment***

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claims 89-93, 96-97, 109, 111 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5,700,637 (SOUTHERN) (the reference provided by applicants in the IDS filed on 8/9/04).

The instant claims briefly recite a method of forming arrays of oligonucleotides on a solid support by attaching to the solid support a linker suitable for coupling oligonucleotides, and forming an array of a plurality of capture oligonucleotides by series of cycles of activating selected array positions for attachment of multimer nucleotides, and the capture oligonucleotides on the array hybridize with complementary oligonucleotide target sequences under uniform conditions.

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Southern et al teach an array of oligonucleotides and methods of forming Oligonucleotides on solid support. The reference teaches that the glass slide (solid support) was derivatized with a long aliphatic linker that can withstand the conditions used for deprotection of monomers (nucleotides) (see i.e., column 8), and the derivatized glass support is used for synthesis of oligonucleotide array (refers to the array of the capture oligonucleotides)(reads on the instant claim method steps). Further Southern et al teach that the invention provides apparatus for analyzing a polynucleotide sequence. The reference teaches applying labeled polynucleotides ( refers to the complementary oligonucleotide target sequences of the instant claims) to the oligonucleotide array under hybridization conditions (refers to uniform hybridization conditions of the instant claims).

The reference teaches that the array is formed by initially applying a first set of four bases as broad stripes on the glass support; a second set of four bases is laid down in four stripes equal in width to the first, and orthogonal to them; and the process is repeated until a desired length on oligonucleotide sequence array is formed (i.e., see column 14). Thus, the reference clearly anticipates the claimed invention.

18. Claims 89, 91, 93, 96 and 111 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5,837,832 (Chee et al) (reference provided by applicants in IDS filed on 4/26/04).

The instant claims briefly recite a method of forming arrays of oligonucleotides on a solid support by attaching to the solid support a linker suitable for coupling oligonucleotides, and forming an array of a plurality of capture oligonucleotides by series of cycles of activating selected array positions for attachment of multimer nucleotides, and the capture oligonucleotides

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on the array hybridize with complementary oligonucleotide target sequences under uniform conditions.

NOTE In the claimed method of forming array of oligonucleotides, the limitation 'the capture oligonucleotides on the array hybridize with complementary oligonucleotide target sequences under uniform conditions' is considered as intended use of thus formed array, not the method step.

Chee et al teach arrays of nucleic acid probes on biological chips. Chee et al teach that the DNA chips containing arrays of oligonucleotide probes can be used to determine whether a target nucleic acid sequence has nucleic acid sequence identical to or different from a specific reference sequence (i.e., see the abstract). The reference teaches that the array of probes comprise probes exactly complementary to the reference sequence (refer to the capture oligonucleotides of the instant claims) (see i.e., abstract). Chee et al teach that the arrays are synthesized directly on the support directly or pre-synthesized oligonucleotides (refers to the instant claim multimer oligonucleotides) can be used to make the oligonucleotide probe arrays (i.e., see column 2).

The reference teaches preferred method of oligonucleotide probe array synthesis involves the use of VLSIPS technology, which uses photolabile 5'-protected N-acyl deoxynucleotides, phosphoramidites, surface linker chemistry, combinatorial synthesis strategies. The reference teaches that the basic strategy of oligonucleotide synthesis is outlined in Fig. 28. The surface of solid support is modified yielding reactive hydroxyl groups in the illuminated area, and a protected oligonucleotide is coupled to the activated region. The selective photodeprotection and coupling cycles are repeated until the desired set of product is obtained (refers to the instant claim method steps) (i.e., see column 27). Thus, generated oligonucleotide probe array can be

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used to identify target DNA sequence. The reference teaches that the array of probes of hybridize to a target nucleic acid sequence. The reference teaches that various version of the DNA chips made with different number of bases (or the length), such as the probes with 15, 10, 14 and 18 bases long, and all the probes have single base substitution. The reference clearly anticipates the claimed invention.

19. Claims 89-97, 109 and 111-112 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5,510,270 (Fodor et al).

The instant claims briefly recite a method of forming arrays of oligonucleotides on a solid support by attaching to the solid support a linker suitable for coupling oligonucleotides, and forming an array of a plurality of capture oligonucleotides by series of cycles of activating selected array positions for attachment of multimer nucleotides, and the capture oligonucleotides on the array hybridize with complementary oligonucleotide target sequences under uniform conditions.

Fodor et al teach a method for synthesizing and screening oligonucleotides on a solid support. The method provides for the irradiation of a first predefined region of a substrate comprising immobilized nucleotides on its surface, without irradiation of a second predefined region of the substrate. The irradiation step removes a protecting group from the immobilized nucleotides. The substrate is contacted with a first nucleotide to couple the nucleotide to the immobilized nucleotides in the first predefined region without coupling in the second predefined region. At least a part of the first predefined region and at least a part of the second predefined region are subjected to further irradiation. The substrate is contacted with a second nucleotide, which couples to the immobilized nucleotides in at least part of the first and at least part



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of the second predefined regions. By repeating these steps, an array of diverse oligonucleotides is formed on the substrate (refers to the instant claimed method) (i.e., see abstract). The reference teaches that a number of the set of small molecules which can be joined together to form a polymer, and the set of monomers include set of nucleotides (refers to the multimer nucleotides), Fodor et al teach the solid support is substantially flat and may have wells, raised regions, etched trenches, or the like (i.e., see column 7, under substrate or in column 11) (refers to instant claims 94). Fodor et al teach that the substrate surface is composed of inorganic glass (i.e., see column 11) (refers to instant claims 91-92). Fodor et al teach that the substrate is conventional microscope slide or coverslip (i.e., see column 16) (refers to instant claim 92).

Fodor et al teach the use of 'nitrobenzyloxy carbonyl' as the protecting group (i.e., see column 7) (refers to instant claim 106). Fodor et al teach that the surface of the substrate contains reactive groups which can be carboxyl, amino, hydroxyl (refers to instant claim 97)(i.e., see column 11). Fodor et al teach that the any conceivable substrate may be employed in the invention. The substrate may be in the form a sheet, tubing spheres, plates, films, and the any convenient shape such as disc, square, sphere, sphere, circular, and the substrate may contain raised or depressed regions on which the synthesis takes place (refers to instant claim 95) (i.e., see column 11).

Fodor et al teach that the substrate is polymerized with gels or polymers such as (poly)tetrafluoroethylene, (poly)vinylidenedifluoride, polystyrene, polycarbonate (refers to instant claim 104 )(i.e., see column 11).

Fodor et al use a mask to illuminate(or irradiate) selected regions of the substrate and uses photolithographic technique in synthesis of polymer arrays. Fodor et al teach that a square area is divided into square boxes, and the first reactions are carried out in the vertical columns

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and the process is repeated in the horizontal direction for the second unit of dimmer (i.e., see columns 18-19) (refers to instant claim 90). Fodor et al teach that one mask can be used in all eight steps if it is suitably rotated and translated. For example, a mask with a single transparent region could be sequentially used to expose each of the vertical columns, translated  $90^{\circ}$  and then sequentially used to allow exposure of the horizontal rows. Fodor et al teach that by controlling the locations of the substrate exposed to light and the reagents exposed to the substrate following exposure the locations of each sequence will be known (i.e., see column 9). The reference teaches that the photolithographic techniques disclosed could be used to produce thousands, or millions of oligomers on the substrate. The reference further teaches for monomer set of size  $n$ ,  $n \times 1$  cycles are required to synthesize all possible sequences in length  $1$ . The reference claims recite that  $10^6$  different oligonucleotides in  $10^6$  respective selective regions. The reference claim 1 recites that the array of at least 100 oligonucleotides having different sequences is formed.

The reference teaches thus formed oligonucleotide array will have variety of uses including, screening large number of polymers for biological activity by exposing the array to receptors. The receptor chosen can be a nucleic acid sequence (i.e., see column 6, definition of receptor). And the reference claim recites that the oligonucleotide array is contacted with a receptor (nucleic acid) to identify an oligonucleotide complementary to said receptor (refers to the oligonucleotide target sequence). NOTE In the claimed method of forming array of oligonucleotides, the limitation 'the capture oligonucleotides on the array hybridize with complementary oligonucleotide target sequences under uniform conditions' is considered as the intended use of thus formed array, not the method step. Thus the reference clearly anticipates the claimed invention.

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20. Claims 89-94, 96-97, 109, 111-112 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5,527,681 (HOLMES et al).

The instant claims briefly recite a method of forming arrays of oligonucleotides on a solid support by attaching to the solid support a linker suitable for coupling oligonucleotides, and forming an array of a plurality of capture oligonucleotides by series of cycles of activating selected array positions for attachment of multimer nucleotides, and the capture oligonucleotides on the array hybridize with complementary oligonucleotide target sequences under uniform conditions.

Holmes et al teach a synthetic strategy for the creation of large scale chemical diversity using solid phase chemistry, photo labile protecting groups and photolithography achieve light directed spatially addressable parallel chemical synthesis of an array of polymers (i.e., see abstract). Holmes teaches that the preferred embodiment provides for the synthesis of an array of polymers in which individual monomers in a lead polymer are systematically substituted with monomers from one or more basis sets of monomers. The reference teaches that the substrate is flat and it may have synthesis regions separated by structures, and the surface may have wells, raised regions, or etched trenches (i.e., see column 5). The reference teaches that the substrate has linker molecules, which are optionally protected with photo removable protecting groups. The reference teaches that the mask is used and rotated for the following coupling steps. The reference claims and specification disclosure are drawn to a method of synthesizing an array of oligonucleotides on a surface of a substrate clearly anticipates the claimed invention.

Holmes et al teach the substrate with surface, and optional Linker molecules are provided on the surface (i.e., see column 7).

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The reference teaches thus formed oligonucleotide array will have variety of uses including, screening large number of polymers for biological activity by exposing the array to receptors. The receptor chosen can be a nucleic acid sequence (i.e., see column 4, definition of receptor). And the reference claim recites that the oligonucleotide array is contacted with a receptor (nucleic acid) to identify an oligonucleotide complementary to said receptor (refers to the oligonucleotide target sequence). NOTE In the claimed method of forming array of oligonucleotides, the limitation 'the capture oligonucleotides on the array hybridize with complementary oligonucleotide target sequences under uniform conditions' is considered as the intended use of thus formed array, not the method step. Thus the reference clearly anticipates the claimed invention.

### ***Double Patenting***

21. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

22. Claims 89-97, 109, and 111-112 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-75 of U.S. Patent No. 6,506,594 B1 (reference provided by applicants 4/26/04). Although the conflicting claims are not identical, they are not patentably distinct from each other because the reference claims are drawn to the use of array of oligonucleotides synthesized by the instant claim method. The reference solid support with capture oligonucleotides read on the instant capture oligonucleotides.

23. Claims 89-97, 109, and 111-112 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-153 of copending Application No. 10/272,152. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reference claims are drawn to the use of array of oligonucleotides synthesized by the instant claim method. The reference solid support with capture oligonucleotides read on the instant capture oligonucleotides.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Response to Arguments***

24. Applicant's arguments filed on 8/9/04, regarding the rejection of claims over Lipshutz et al have been fully considered but they are not persuasive.

Claims 89, 93 are rejected under 35 U.S.C. 102(b) as being anticipated by Lipshutz et al (BioTechniques, Vol 19, No. 3, 1995, pages 442-447).

Lipshutz et al teach high density oligonucleotide arrays created using light directed chemical synthesis. Light-directed chemical synthesis combines semiconductor based photolithography and solid phase chemical synthesis. The reference teaches linkers modified with photochemically removable protecting groups are attached to a solid substrate. Light is directed through a photolithographic mask to specific areas of the synthesis surface, activating those areas for chemical coupling. The first of a series of nucleoside harboring a photolabile protecting group at the 5' end is incubated with the array, and chemical coupling occurs at those sites that have been illuminated in the preceding step, next light is directed to a different region of the substrate through a new mask, and the chemical cycle is repeated. Using the proper sequence of masks and chemical steps, a defined collection of oligonucleotides can be constructed, each in a predefined position on the surface of the array. The reference clearly anticipates the claimed invention.

*Applicants argue that Lipshutz et al teach attaching single nucleosides to sites that have been illuminated, in contrast attaching multimer nucleotides such as tetramers in accordance with the present invention. Applicant's arguments have been considered and are not persuasive, because the instant amended claim recites 'activating selected array positions for attachment of multimer nucleotides, and attaching multimer nucleotides at activated positions,' which is considered as multiple activated array positions, and multiple nucleotides attached at the multiple positions. And further in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., tetramer) are not recited in the rejected claim(s). Although the claims are interpreted*

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*in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).*

*And further applicants argue that the Lipshutz et al does neither disclose nor suggest using capture oligonucleotides that bind to complementary oligonucleotide target under uniform hybridization conditions, as required by the instant claims.*

*In response to applicant's argument that 'using capture oligonucleotides that bind to complementary oligonucleotide target under uniform hybridization conditions', a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and In re Otto, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).*

25. Applicant's arguments filed on 8/9/04, regarding the rejection of claims over Fodor et al have been fully considered but they are not persuasive.

Claims 89 and 93 are rejected under 35 U.S.C. 102(b) as being anticipated by Fodor et al (Nature, vol. 364, August 1993, pages 555-556).

Fodor et al teach a method of preparing miniature biological arrays using light directed combinatorial chemical synthesis of biopolymers on a solid support. Fodor et al teach light directed chemical synthesis employs semiconductor based photolithography and solid phase chemical synthesis. Synthesis linkers modified with photochemically removable protecting groups are attached to a solid support, light is directed through a photolithographic mask to specific areas of the synthesis surface effecting localized photodeprotection. The first of series of chemical building blocks is incubated with the surface and chemical coupling occurs at those sites which have been

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illuminated in the preceding step. Next the light is directed to a different region of the substrate through a new mask, and the chemical cycle is repeated. The reference clearly anticipates the claimed invention.

*Applicants argue that Fodor et al teach attaching single nucleosides to sites that have been illuminated, in contrast attaching multimer nucleotides such as tetramers in accordance with the present invention. Applicant's arguments have been considered and are not persuasive, because the instant amended claim recites 'activating selected array positions for attachment of multimer nucleotides, and attaching multimer nucleotides at activated positions,' which is considered as multiple activated array positions, and multiple nucleotides attached at the multiple positions. And further in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., tetramer) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).*

*And further applicants argue that the Fodor et al does neither disclose nor suggest using capture oligonucleotides that bind to complementary oligonucleotide target under uniform hybridization conditions, as required by the instant claims.*

*In response to applicant's argument that 'using capture oligonucleotides that bind to complementary oligonucleotide target under uniform hybridization conditions', a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a*



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*manipulative difference as compared to the prior art. See In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and In re Otto, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).*

***Conclusion***

26. No claims are allowed.

27. Applicant's amendments to the claims, and submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 4/26/04 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


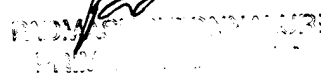
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Padmashri Ponnaluri whose telephone number is 571-272-0809. The examiner is on Increased Flex Schedule and can normally be reached on Monday through Friday between 7 AM and 3.30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Padmashri Ponnaluri  
Primary Examiner  
Art Unit 1639

07 March 2005

